

MEDICAL EDUCATION

The Perinatal Education Programme

Over a million infants are born annually in South Africa,¹ with a perinatal mortality rate of at least 30/1 000 deliveries² and an estimated maternal mortality rate of at least 40 to 80/100 000 deliveries.^{3,4} These unacceptably high rates reflect both the poor socio-economic conditions experienced by the majority of the population and inadequate provision of health care, especially in rural areas. One of the steps needed to improve this situation is establishment of an extensive system of continuing education for all health care workers. The present shortage of funds, staff and training facilities has precluded this option.

Based on the teaching methods of a highly successful distance learning programme in advanced newborn care for doctors and nurses in the USA,⁵ the Perinatal Education Programme (PEP) aims at improving the care of mothers and their newborn infants in all communities in southern Africa. Written by an editorial board consisting of neonatologists, obstetricians and midwives, after wide consultation with colleagues in all provinces, the PEP provides the educational material required by individuals or local health authorities to manage their own courses in perinatal care. Although written primarily as a course for midwives, the PEP is eminently suited as an update programme for family practitioners and medical officers. Foreign medical graduates, whose medical training often has not equipped them for practice in developing countries, may find the programme of particular value. It could also be used by medical students, interns and registrars as part of their formal training.

The programme, which is available in English or Afrikaans, is presented in the form of two loose-leaf manuals and consists of 30 theory units and 19 illustrated skills workshops. The former address all the common or important clinical problems encountered in maternal and infant care, while the latter demonstrate the practical procedures needed in the care of mothers and newborn infants. The 15 units in the maternal care manual address topics such as the provision of antenatal care using a patient-held antenatal card, symphysis-fundus height measurements to monitor fetal growth and the advantages of recording labour observations on a partogram, as well as management of the complications of pregnancy, labour and the puerperium. The 15 units in the newborn care manual cover all the knowledge needed to care for both well and sick or small infants. A problem-orientated question-and-answer method of teaching is used along with case studies to place the newly learned knowledge in a clinical context. Flow diagrams are provided to summarise diagnostic approaches and management protocols. The PEP attempts to provide a comprehensive consensus statement on perinatal care in southern Africa and, thereby, to standardise management between different regions and authorities.

Correct attitudes, such as the doctor and midwife working as a team, the importance of the patient sharing responsibility for her own care, and the role the community should play in the provision of local health services, are stressed. The concept of an integrated, regionalised health care system with close co-operation between clinics and hospitals is applied throughout the programme.

A multiple-choice test before and after each unit allows students to assess their progress through the programme. The responsibility for learning is placed squarely on the shoulders of the student. A teacher is

not needed, although most PEP courses are managed by a co-ordinator who arranges regular group meetings for 5 - 10 students. At these group meetings the content of the unit just studied is discussed and any conflict between the PEP and current hospital policy is debated. Most midwives find that 3 weeks is adequate to study a unit, so that the time needed to complete a manual is about a year. Local experts are sometimes needed to assist with the more complicated skills workshops. It is then the responsibility of the local co-ordinator to find a suitable resource person in their work environment. A formal multiple-choice examination is offered on completion of each manual and successful candidates are awarded a certificate. It is to be hoped that in future the certificates will be recognised by the registration authorities.

This innovative method of self-education enables large numbers of midwives and doctors to improve their standard of perinatal care without the need for formal tuition and without having to leave their place of work to attend an in-service course at a regional training centre. The manuals cost R50 each. At present over 1 000 midwives are using the programme, while scores of doctors have bought programmes for their own use. A field trial with 100 midwives in both urban and rural areas showed a highly significant improvement in cognitive knowledge. These results have recently been discussed at medical congresses.^{6,7} Comment by midwives on completion of the course indicated that they felt more confident in managing clinical problems and that job satisfaction had therefore improved. A long-term research project is planned to determine whether widespread use of the programme in a health region will significantly alter the quality of care provided.

It is hoped that within a few years all medical students, doctors and nurses who care for pregnant women and newborn infants will take the opportunity of using the PEP to improve and expand their clinical abilities and, as a result, help to provide better quality perinatal care to all communities in southern Africa. Further details on the PEP can be obtained from the Editor, Perinatal Education Programme, PO Box 34502, Groote Schuur Hospital, Observatory, 7925.

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